

Combating the global financial crisis - the role of international cooperation

HKMA Distinguished Lecture, 16 December 2008

Introduction

It is an honour and a pleasure to be giving this HKMA distinguished lecture. I thank Joseph Yam for his kind invitation. I also thank Joseph and his colleagues at the HKMA for hosting the FSF Asia-Pacific Regional Meeting that has just concluded.

The crisis afflicting the global financial system has now reached a critical stage. On the one hand the combined responses of governments, central banks, regulatory authorities and the private sector have created a base of stability, admittedly still fragile, for the world financial system. On the other hand, the sharp slowdown in global growth will necessarily translate into credit losses that will have a further impact on the banking industry. To mitigate the recession and break this vicious circle a further round of responses – including fiscal, monetary and regulatory policies – is proving necessary.

Shortcomings in assessment ahead of the crisis

One striking aspect of the crisis is precisely how its unfolding has continued to catch both policy makers and private sector players by surprise. It started with defaults in a marginal segment of the financial services industry, then quickly spread to virtually all assets. From being a US-only event, it has become global, and in fact it is forcing and accelerating the redressing of world macro imbalances that have been with us for 15 years. The current recession is the result.

None of these steps had been anticipated in a timely way by the relevant actors. And when I say “in a timely way” I mean with enough lead-time to permit action that could have affected the outcomes. Policies that were reactive, and sometimes even very effective, but never proactive, seem to have been the rule. This is of course not the approach to policy-making that we try to employ when it comes to controlling inflation or meeting other objectives of macroeconomic policy. One reason for this asymmetry is that our knowledge of all the interactions within the financial services industry in a global world was quite superficial at the beginning of the crisis.

The private sector has not done any better. The immediate outcome of the private sector’s own shortcomings in assessment has been the sudden death of many businesses and a generalized credit contraction. Our collective understanding of these processes has certainly deepened during the last year but we do not yet have a conscious and fully-fledged view of how the financial

sector will look in the years to come. Much of the effort has gone so far into initiatives to address the short-term and medium-term weaknesses in the system, but now we may be approaching the time when it will be appropriate to start thinking about reconstruction. To do so, however, we first have to see when and how reality eluded our or the market's perceptions ahead of the crisis.

First, the underlying reason why problems in US subprime loans led to the current broad-based macrofinancial crisis was the global nature of exposures to increasing risk aversion and deleveraging. *Risk is now priced and traded at the global level.* Over the years preceding the crisis, the overall price of risk fell significantly, and risky, illiquid positions were accumulated in many different national and international markets. When problems emerged in the specific category of US subprime, this started a process which ultimately led to a repricing of risk across all asset classes. As Tim Geithner noted when he delivered this lecture two years ago, this pattern is not a new one: in times of financial crisis, when investors cut risk-taking, they cut it *everywhere*, and the differing fundamentals of individual markets become irrelevant.

Second, many saw risks and leverage increasing, but an optimistic view that overestimated the true degree of risk dispersion and diversification in credit markets had become the conventional wisdom. In particular, even when it became apparent that credit standards had deteriorated, neither capital markets, nor bankers, nor regulators perceived the extent to which the risk exposures generated by securitisation stayed on bank balance sheets. Also we collectively overestimated the ability of the system to absorb, rather than

amplify, pressure for de-risking and deleveraging. On another front, it was only once the crisis was underway that the world seems to have discovered the risks inherent in business models that relied excessively on wholesale funding markets, both for specific institutions and for the system. And, given that these risks were misunderstood at the domestic level, all the more so was this the case at the international level, where firms, investors and regulators were farther from the markets where these bad risks were originated.

One way to explain this collective blindness is to review those market developments that, in the years leading to the crisis, made both the regulators' and market's knowledge suddenly obsolete, while increasing the opacity of the financial system as a whole. Let me give you a few examples¹.

- For the first time in recent years securitization was applied to lower quality mortgages. Monitoring by capital markets of this lower quality was made difficult by the fact that the probability of default did not factor in i) the probability of a drop in real estate prices in the US at the national level, which had not occurred since the Great Depression, ii) the effects of changes in lending standards on probabilities of default in these markets, or iii) the cross correlation across defaults and between defaults and the rest of the economy.
- Second, especially after 2004, the massive amount of issuance of collateralized obligations by a few players increased both the market

¹ For a detailed analysis see L. Zingales (2008), "Causes and effects of the Lehman Brothers bankruptcy", testimony before the Committee on Oversight and Government Reform, United States House of Representatives, October.

power of these players over the credit rating agencies and their dependence on this source of revenue.

- Third, the SEC's relaxation in 2004 of pre-existing limits on leverage for investment banks vastly increased the complexity of their risk management. For some time neither banks nor regulators seemed to have fully perceived how this decision would radically change the industry.
- Finally, the rapid growth of the CDS market, which in ten years went from zero to 44 trillion dollars in notional amounts, created an entirely new definition of counterparty risk that was much more difficult to assess, evaluate and collateralize.

With the benefit of hindsight one may be tempted to say that regulators should have probed more deeply, for example, into the risk characteristics of triple-A rated super senior CDO tranches, and should have realised that the risk of a very sharp fall in the credit quality and market value of such instrument was much greater than that of a triple-A rated bond. And, since it is the responsibility of supervisors to be especially attentive to tail risks and extreme events, they should have required banks to make appropriate capital charges against these instruments. This might have been the right thing to do but, as the previous discussion has shown, the knowledge leading to that type of behaviour simply was not there.

There are many lessons that one should draw from the current crisis but one especially stands out for its general and all-encompassing character. In the

future we will all be much more alert to the systemic implications of both market developments and of our own decisions, and this will have profound implications in many different ways. For one thing, financial innovation will not simply be welcomed for its narrow, specific benefits, as has been the case in the past, but it will be carefully scrutinized for its potential systemic risks. This may well dampen the growth of the financial service industry, while enhancing its survival in the long term. Furthermore, it is no longer true that the threat to let a financial institution fail is the most effective weapon against moral hazard. When implications of defaults are systemic, and in a global world this is the case much more often than in the past, this threat is not credible to say the least. And with this goes our reliance on the financial system's incentive to credibly regulate itself, unless we can find other mitigants of moral hazard that are immune to systemic implications. Finally, we as regulators have to take a closer look at ourselves, with a view to eliminating everything that contributes to our segmented perception of events in the financial system.

Response to the crisis

A financial crisis – an event in which the financial system fails at its core tasks, including allocating savings, financing investment, pricing assets, and transferring risk – poses difficult challenges to policy in terms of assessment and the calibration of responses. These tasks are difficult at the domestic level, and still more complex at the global level.

A critical set of challenges relate to information gaps. We have made progress in recent years in developing analytical tools and metrics for assessing risks ahead of a crisis. Unfortunately, almost by definition, a crisis involves events and processes that are unexpected. And once problems emerge, their dimensions and implications are impossible to gauge quickly. At the international level, assessment is more challenging still. Cross-border exposures are difficult to assess, and it is especially difficult to anticipate confidence effects, which are often the primary means of cross-border contagion.

Also, determining how to calibrate the response is a classic case of decision-making under limited information and uncertainty. There is no way to know either *ex ante* or *ex post* whether one made the right choice. A too hasty response in some countries may increase moral hazard in others. But, when we have reached the stage where a forceful response is needed, a delay by some countries in joining the others will dilute the impact of this response and delay prompt resolution.

In summary our own vastly imperfect knowledge and its segmented nature would have made a faster and more effective crisis response unlikely, since we were just learning what to do while the crisis unfolded. Under the circumstances, I think governments and central banks have been remarkably flexible and open-minded in developing and implementing creative responses to the conditions that we have faced.

We can identify four distinct areas where authorities have needed to act: funding liquidity pressures in interbank markets; solvency risks facing systemically important institutions; medium- and long-term measures to strengthen the system; and the slowdown in the macroeconomy. Each has featured a number of critical information gaps that have had to be overcome, and each has presented its own challenges in terms of international coordination.

Liquidity pressures were the primary focus of policymakers in the early stages of the crisis, starting in August 2007, and have remained a concern ever since. Central banks understood at an early stage that they needed to act, and act quickly, given the sudden and rapid rise in the market's demand for liquid funds, an asset for which they are ultimately the only source of supply. Central banks initially focused on their own markets, but given cross-border confidence effects as well as the need for foreign currency liquidity in many markets, they rapidly developed a number of channels of cooperation, including coordinated policy announcements and foreign currency swap lines.

After the collapse of Lehman in September, the systemic nature of the crisis has manifested itself with unprecedented force. In financial markets, we have observed a rapid shift from liquidity to *credit risks*, from a prevalent recourse to the market and central banks to massive governments' intervention. Responses have included varying combinations of deposit guarantees, debt guarantees, capital injections, and asset purchases. While these have varied

with local conditions, the need for coordination is well understood, and work to make these responses consistent is well underway.

What have been the lessons of the experiences of recent months in dealing with the liquidity and solvency problems that have buffeted financial systems? For one thing, we have learned that in this new global risk environment the speed of developments has increased dramatically and correspondingly reduced the time that authorities have for an effective response. This has further increased our reliance on preventative measures ahead of a crisis.

Second, we have learned that the international aspects of crisis response have become many times more important than before. The transmission of shocks across borders now happens through more diverse channels than even a few years ago. Given the many international externalities involved in the measures that might be taken by national authorities, the mechanisms for coordinating crisis response need to be in place well in advance. Plans need to be formulated and potential consequences must be thought through. Resolution procedures and bankruptcy arrangements also need to be harmonised better across markets.

Strengthening the system

From the start of the current crisis, it has been clear that short-term measures to address liquidity and solvency have had to be complemented by actions to strengthen the system in the longer term. Just as there are critical

externalities in short-term response measures that call for international coordination, these longer term actions have needed to address the cross-border effects of regulatory policies in order to assure the maintenance of a level playing field.

The work to strengthen global systemic resilience is proceeding with a degree of international cooperation and at a speed that would have been unthinkable only one year ago. In developing these initiatives, there has been a broad underlying consensus among authorities that the goal should be to create a financial system that is less leveraged, better capitalised, and more transparent, and that features stronger incentives for all participants in the system.

The FSF has proven to be an effective vehicle for coordinating these actions at the international level. Thanks to our broad sectoral membership, which encompasses finance ministries, central banks, top regulators, international institutions, international standard-setting bodies, and expert groupings, we are able to keep one another apprised of the risks facing different sectors and of our respective work programs. Importantly, our membership includes most of the key actors responsible for implementing the actions that we recommend. The willingness of our members to exchange information and views, and to alter and accelerate work programs, has been truly remarkable. However, the crisis has also pointed up the need for us to expand our membership geographically, particularly with respect to the larger emerging

economies. This is an issue that we are working on very seriously and on which we expect to make progress soon.

A first set of initiatives taken by the FSF has focused on reducing information gaps: in terms of the raw data available to authorities and the market; in terms of the mechanisms, such as credit ratings, through which this information is compiled and used by the market; and in terms of the analytical work we do in the official sector to assess risks and vulnerabilities in the system. Improved international accounting and disclosure practices should help markets and authorities understand risks and exposures better. Accounting standard setters have been taking important steps to address weaknesses in such areas as the valuation of illiquid securities and the treatment of off-balance sheet vehicles. Securities regulators have taken a number of actions intended to improve the role of credit ratings in the system, to clarify their appropriate use by investors and regulators, and to address concerns about conflicts of interest in the ratings process.

Closer collaboration between the IMF and FSF is one way that we in the global community hope to improve our ability to stay on top of risks in the future.

A second set of initiatives has focused on prudential regulation and oversight. I believe strengthened capital and liquidity frameworks will be seen as a central achievement of the work to enhance systemic resilience. More capital will be required against trading and securitisation risks, and more intense

oversight will be applied on liquidity risk management by banks. These improvements will be phased in carefully, so as not to exacerbate situations that are still fragile. Given the importance of preserving a level playing field, this work has necessarily been coordinated internationally.

Third, the FSF has initiated different work streams directed at reducing procyclicality in the financial system, i.e. the tendency of the financial system to accumulate excessive risk and leverage in good times and to shed risks excessively in a downturn. Efforts are also underway to improve the incentives created by compensation systems in financial firms.

Fourth, supervisors have agreed to cooperate more closely in overseeing internationally active banks, through such vehicles as supervisory colleges.

Finally, going forward, it will be crucial to review the perimeter of regulation, in order to reduce gaps and inconsistencies in regulatory regimes and to address potential systemic issues that are present in sectors currently not regulated.

New challenges for macroeconomic policies

While this structural response is clearly an essential part of the cure, as it helps to renew confidence in the markets, it is also clear that many of the measures we are taking or discussing will only have an impact over the

medium term. This is in the very nature of a structural response, which is foremost concentrated on the regulatory framework.

Today the immediate challenge we face is to avoid a situation where the recessive forces deepen and combine with the impairment of financial markets in creating a vicious spiral. Over the last few months, the outlook has quickly shifted from slowdown to recession, from supply to demand shock, and from inflation to deflation risks.

This new situation requires not only further and bolder actions, but also to step up the level of cooperation and common understanding between policy makers both at the national level and internationally. Let me briefly review the main challenges confronting the conduct of macroeconomic policies looking forward.

Monetary policies

Monetary policies in response to the drying up of global liquidity have been extremely responsive and fully cooperative. On October 8, coordination in the monetary field reached new heights, with the simultaneous reduction of interest rates in eight major central banks.

Since then official interest rates have been reduced in rapid and successive waves across the globe, responding to the deterioration of the economic outlook and the rapid receding of inflation. Today the margins for further

action are rapidly shrinking particularly in the US and Japan where policy rates are close to their zero lower bound.

Rapidly falling inflation expectations and, in some areas, deflation risks, together with the impossibility of lowering rates below zero, pose the most challenging test for the effectiveness of monetary policies. We know that the inability to maintain sufficiently low real interest rates has aggravated crises in the past. At the start of the Great Depression, for example, short term real interest rates actually increased in the US (up to more than 10 per cent!) until 1933, because of the rapid fall in inflation. In the Japan of the “lost decade” short term real interest rates remained relatively high until 1995. Such developments have been often pointed to as key factors driving these economies into prolonged depression.

The list of monetary policy instruments available to central banks to reflate the economy when official rates are close to or at zero is fairly wide. It includes:

- a “quantitative easing” policy, i.e. expanding the money base beyond what is strictly needed to keep the official rates at zero, in order to reduce liquidity risks and provide incentives for financial intermediaries to expand their credit (elements of this policy, amply used in Japan until recently, are visible in the exceptional actions of many central banks today);
- measures to reduce longer term interest rates, through direct purchase of long term government securities and/or carefully designed

communication to influence market expectations (Bank of Japan and the Fed in 2002-03); and

- the purchase of a wide range of private assets from securities to equity (as our guest, the HKMA, experienced during the Asian crisis ten years ago).

As effective these unconventional monetary policy instruments may be in boosting the economy when price stability is at stake, we have to be aware of their limits and of their broader implications.

First, the effects of many such policies are not well-known: the conduct of monetary policy is bound to be surrounded by much more uncertainty than is normally the case. It is for example unclear how far longer term rates, and in particular the risk premia embedded in those rates, can be brought down by liquidity injections in a situation of widespread uncertainty about economic prospects. Well designed communication by central banks may be crucial in this respect.

Second, and most importantly, we should always keep in mind that the responsiveness of the economy depends to a large extent on the health of financial intermediaries, in the absence of which even powerful liquidity injections are not greatly effective.

Third, there is a risk of introducing distortions in financial prices, and this calls for particular care in designing the measures.

Fourth, unconventional measures may have a more direct redistributive impact on specific sectors of the economy or categories in society than normal monetary policy actions. This implies a high degree of common understanding and cooperation between fiscal and monetary authorities, as part of a clear definition of respective responsibilities and fields of action.

Fiscal policies

As the effectiveness of action in the monetary field becomes less certain, fiscal stimulus becomes more necessary. When financial markets are not working properly and credit constraints are widespread, private spending is more sensitive to current disposable income, and the impact of a fiscal stimulus is therefore greater.

To maximize their effectiveness, fiscal actions should not affect the longer term sustainability of public finances, in order to avoid the expectations of higher future taxes; moreover, the stimulus has to be directed where its impact is strongest and fastest.

In the current circumstances, the size and quality of international coordination is crucial. Uncoordinated moves create spillovers and relative price or exchange rate movements that can greatly reduce the incentives to implement a fiscal stimulus at the individual country level. On the contrary,

with coordinated action taken globally, an individual country's measures will be more significant with the joint benefit of an increase in foreign demand. The quantitative effects of the spillovers can be quite substantial. Recent simulations conducted at the Bank of Italy find that a coordinated fiscal action at the European level could increase by some 30 per cent the impact of the same measure taken in Italy alone.² The results reported by the IMF in its latest World Economic Outlook are also quite telling in this respect.³

Moreover, in the case of concerted action, country level risk premia may remain more stable than otherwise.

But coordination does not imply that every country has to do the same. Starting conditions need to be taken into account. Countries that are net creditors vis-à-vis the rest of the world and with sound public finances, in Asia and Europe, obviously have the possibility to take a frontline position. By doing so they would not only reduce the consequences of the crises for their own economies but also help to contain the weakening of net debtors' economies and currencies. Moreover, bolstering internal demand in these countries goes in the direction of reducing the large global imbalances accumulated so far and thus may help to set the foundations for a more sustainable growth looking forward.

² The exercise is conducted using a DSGE model described in L. Forni, A. Gerali and M. Pisani (2008), "The macroeconomics of fiscal consolidations in a monetary union: the case of Italy", Bank of Italy, forthcoming. See also L. Forni, L. Monteforte and L. Sessa (2008) "The general equilibrium effects of fiscal policy: Estimates for the euro area", Journal of Public Economics.

³ IMF, "World Economic Outlook, October 2008.

In other countries, where public finances and/or net external positions are less sound, the margins for action are obviously more limited. This does not mean that they are nil. But it implies that medium term growth-enhancing and debt-reducing policies become more crucial. For example, compensating actions may be taken to bolster pension reforms, in order to lighten the burden coming from an aging population and increase participation rates; or to implement deep restructuring measures in the public sector to enhance the efficiency and quality of public spending. If taken with determination, such actions can create room for maneuver in these countries so that they can alleviate the effects of the crisis and improve growth prospects.

As fiscal measures are being taken in many countries to counteract the economic contraction, the need to ensure that individual actions come to form a coherent approach is more pressing. In Europe, the European Commission has proposed a plan, currently under discussion, for a concerted action of fiscal authorities, that is very much in line with the principles I have just outlined. In the context of the European single market this is an absolute necessity. But I think that great benefits could derive from adopting a similar approach at the global level.

Conclusion

The main theme of this conversation is that at the origin of the crisis we find a variety of market developments spurred by financial innovation that were not understood neither by the market actors, banks, and capital markets, nor by

regulators. The future challenge lies in producing an environment that is innovation friendly but where knowledge of market participants is adequate. This objective is certainly not realistic for all sorts of financial innovation, for some of the products we discussed, a model taking into account and pricing all risks simply doesn't exist. In other cases the limits to how much financial innovation will be accepted or allowed may come from the unwillingness of the relevant private sector players to provide all the necessary information. Whatever the case it is likely that the future financial system will have more prudential oversight and more standardisation than in the past.

This crisis, as painful as it is, provides all of us with valuable experience that we at the FSF and more generally the supervisory community are building on in designing the future financial system. However the crisis has been remarkable in raising the awareness of all authorities about the need to cooperate and coordinate their actions domestically and internationally. Let us hope that the present momentum will stay even when the situation will improve, as I am confident it will.